This information is intended for use only

tribal regulatory ag

by EPA, state, territory and
encies.

Descriptic

The purpose of the
for each unaddress
formula: Sum of (S
factor applied to th

ETT Score =

S Values
10

5

1

n Values
0 to 5

Implicit

enforcement targeting tool is to prioritize public water systems for enforcement response. It assigns points
;ed violation at a PWS in the last 5 years, which are added to create a total score for each PWS using the
.1 + S2 + S3 + ...) + n where "S" is the severity factor for each unaddressed violation and "n" is a time
e water system. The S and n factors are described below:

ᵼ Sum of (S1 + S2 + S3 + ...) + n

S = violation severity, generally based on Public Notice Tiers

Acute violation, Tier 1. Nitrate MCLs, Acute MRDL (VCode 13), TCR Acute (21), Turbidity TT (43,44),
SWTR TT (41). Note: some Tier 1 instances are not reported in SDWISFED (ex: waterborne disease
outbreaks, or when a system fails to test for fecal or e. coli after any positive repeat)

Other health-based violation, Tier 2. (Vtype=MCL, MRDL, TT) Also, TCR MR Repeats
(Vcode 25 and 26) and Nitrate MRs
Monitoring/reporting violation, or any other violation, Tier 3 (such as PN, CCR, etc)

n = maximum number of years since the system's oldest unaddressed violation

n = (current calendar year) minus (compliance period begin or end date)

**(For example, if the PWS's oldest unaddressed violation in the past five years occurred in the
current calendar year, an n factor of 0 is assigned. If it occurred two years prior, an n factor of 2 is
assigned)**

Violations where compliance period begin date is used: See codes worksheet for details

    SWTR TT - VCodes 41,42
    IESWTR MR - VCode 29. TT - VCodes 37,47. Record keeping VCode = 9, CCode = 0300
    DBP TT - VCode 12. MR - VCode 27 & CCode 0400
    all LCR - VCodes 51,52,53,56,57,58,59,63,64,66
    all PN - VCodes 71,72,75,76
    Misc - VCodes 5,6,7,8,10

For all other violations, the compliance period end date is used

Return to Compliance Note

This calculator includes an Implicit Return to Compliance Tool. It is similar to the process that was
included in SNC calculator that implicitly addresses certain violations if no additional violations of the same
type occur at the PWS in the subsequent 6 months. The new RTC tool addresses all applicable violations
by rule for the rules listed below. Violations that are implicitly RTCd with this tool are not included in the
score for the PWS.

It addresses the following violation codes for TCR, SWTR and IESWTR:

    All TCR violation codes: 21,22,23,24,25,26
    SWTR violation codes 31 and 36 MR, and Code 41 TT (see Codes worksheet for details)
    IESWTR violation code 38 MR

These violation codes are implicitly addressed if there hasn't been a subsequent violation, by rule, for more
than 6 months.

Additional ir

Dataset:

**Violation
Addressing:**

Grouping:

Information

most recent quarterly frozen SDWISFED database. The violation data includes federally-regulated contaminant violations that occurred in the last 5 years at all systems (including PWS with no violations and inactive PWS).

The PWS score includes only violations that have not received an 'addressing' enforcement action, including resolving actions such as return to compliance.

* Violations are considered RTC'd with the earliest SOX, EOX, SO0 or EO0 enforcement action, or on the date the PWS closes, if the state reports a deactivation date. Also counted as RTCing are enforcement action type SO6 and EO6 for violation codes: 9, 12, 29, 37, 56, 57, 58, 59, 63 and 64.

* Violations are addressed with the following codes: S/EF%, S/EFR, S/EFW, SFM, EF-, EF=, EF<, S/EFL, S/EFK, S/EF9, S/EFQ, S/EF&, S/EFV, S/EO0, SFO, EF/, SOX, EOX, ESX, ETX, and S/EO6 for Vcodes 9, 12, 29, 37 and for the following codes if the PWS has "tested back into compliance" and no longer has lead/copper results over the action level: 56, 57, 58, 59, 63, 64. SO6/EO6 codes also count as addressing for violation types 75 and 76 (Public Notice violations) which began before 1/1/2010.

Violations under the same rule, with the same compliance period begin and end dates and violation code, have been grouped together. For example, if a system fails to monitor for the entire group of 21 Volatile Organic Contaminants, a single Severity factor of 1 would apply for the entire VOC group, instead of 21 separate Severity scores of 1 point each. This also groups violations at a PWS if violations, meeting the grouping criteria, are reported for multiple facilities at the PWS.

Other terms

"PWS_list" Worksheet
"AllViols-PTable" Worksheet / Pivot Table
"Compliance Pivot" Worksheet / Pivot Table
"Formal Enf Tracking" Worksheet / Pivot Table
Sys had Tier 1 viols?
PWSType:
Pop Srvd:
Priority System Since
Repeat violator tool:
Total RTCd:
On Path to Compliance:
School or Childcare

used in this Excel Workbook

The primary list of ALL active water systems with their associated scores using the ETT Score/ Sum(S)+n.

A pivot table that sumarizes the number of individual violations in each Region/State that are <u>associated with each active water system</u>. The violation details can be obtained by double-clicking on any of the summary numbers. This table includes all violations at active water systems in the last 5 years - ie both addressed and unaddressed violations. Note that violations that have a value in either the AddrPts or RTCPts columns are not included in the system's score.

The data from PWS_List in Pivot Table format so that states and regions can monitor how many PWS currently have ETT scores of 0, 1-10 or >= 11. Within each of those categories, the table also shows the PWS's "On Path" status: either the PWS has never had an ETT score >= 11 ("Never Has Been >= 11"); it has previously had an ETT score >= 11 and still has not gotten its score down to zero ("Not on Path"); it has gotten its score down to zero through a combination of formal enforcement actions and returning violations to compliance ("On Path"); or it has retunred all violations to compliance ("RTC").

The FormalEnfTracking Pivot Table shows the number of Formal Enforcement Actions (with the exception of enforcement sensitive actions SF9/EF9 and SF&/EF&) that are linked to violations which haven't returned to compliance (RTCed) and the number of Public Waters Systems (PWSs) affected. (Enforcement codes shown are:
'SFK','EFK','SFL','EFL','SFQ','EFQ','SF%','EF%','SFR','EFR','EFW','SFW','SFM','EF-',',EF=','EF<','SFV','EFV','SFO','EF/'. By default, only EFK/SFK, EFL/SFL and SFO are shown to help with tracking BCAs and Administrative Orders.) Double-clicking on any of the counts reveals the underlying enforcement and violation details.
Within the violation details, there is information on the enforcement actions and the violations these actions are linked to. Enforcement actions and violations may appear more than once. "TotNumFormalEnfs" indicates how many separate Formal Enforcement Actions the violation is linked to. High values indicate that multiple formal enforcements have not resulted in a return to compliance (RTC). "PivotCounterFormalEnfs" and "PivotCounterPWSs" should be ignored; they only help Excel avoid double-counting.

Indicates "YES" if the system has had Tier 1 violations in the past 5 years as defined by the PN Tiers(either currently addressed or unaddressed).

The type of water system: Community, Non-Transient Non-Community or Transient Non-Community

Population served by a water system.

Date for end of the quarter when system first scored 11 or higher.

Sum of S points for all addressed, RTCd and unaddressed violations in the past 5 years, without the n time factor.

Sum of all S points that have been RTCd in the past 5 years, without the n time factor

For all systems that have been on a previous quarter's list with a score greater or equal to 11, indicates if the system's prior unaddressed violations are not under enforcement or RTCd ("Not on Path" and shaded dark orange), is under formal enforcement for all prior unaddressed violations with a new score of 0 ("On Path" and shaded light yellow at bottom of list), or all violations have RTCd with a new score of 0 ("RTC" and shaded light green at bottom of list). NOTE: If some of the prior unaddressed violations have been addressed or RTCd but some violations remain unaddressed, this column will indicate "Not on Path"

In the Enforcement Targeting Tool (ETT) list, systems shown as "schools or childcares" are those systems that have either the code for school (SC) or daycare (DC) in the primary service area designation in SDWIS-Fed, regardless of whether they are transient or nontransient systems. Please note that OGWDW's use of the term "school" excludes transient systems.

VioID:
Vcount:
Ctype_pt:
Vtype_pt:
Vcode:
CompPerd Begin:
CompPerd End:
S (or Pts):
n:
AddrPts:
RTCPts:

The violation's ID number, unless several violations are grouped (see Vcount below)
Indicates if several violations are grouped together and given one Severity factor score for the entire contaminant group. See Grouping example above.
Contaminant type (TCR, nitrates, etc)
Violation type (MCL, monitoring/reporting [MR], etc)
Violation code (23 indicates TCR MR violation, etc)
Compliance period begin date
Compliance period end date
Severity factor score as described above
Time factor as described above
A number in this column indicates that the particular violation has been addressed or returned to compliance
A number in this column indicates that the particular violation has been returned to compliance

EPA Region	state	PWSID	PWSName	ETT	Sys has Tier 1 viols?	PWS Type	Pop Srvd
09	09	090400394	Mishongnovi (Upper Sipaulovi/Upper Mishongnovi)	96	Y	CWS	450
09	09	090400107	Sipaulovi (Lower Sipaulovi/Lower Mishongnovi)	59	Y	CWS	523
09	09	090400106	Polacca	48	Y	CWS	2,600
09	09	090400259	Shungopavi	30	Y	CWS	1,500
09	09	090400260	Hopi Cultural Center	17	N	NTNCWS	325
09	09	090400316	Hopi Veterans Center	12	N	CWS	315
09	09	090400057	Second Mesa Day School - BIA	11	Y	CWS	376
09	09	090400104	Upper Moenkopi	9	N	CWS	1,700
09	09	090400395	Hopi High School - BIA	8	N	CWS	1,150
09	09	090400687	Bacavi Village	0	N	CWS	690
09	09	090400054	BIA Keams Canyon	0	N	CWS	861

base: July 2015 SDWIS/FED Freeze

st states, this includes data up to Mar 31, 2015.)

Priority Since Date	Repeat Vio	RTCdPoints	OnPath	School or Childcare
12/31/2009	117	25	Not on Path	
9/30/2013	120	24	Not on Path	
6/30/2013	146	22	Not on Path	
9/30/2014	56	17	Not on Path	
12/31/2014	47	31	Not on Path	
3/31/2015	19	11	Not on Path	
3/31/2015	33	4	Not on Path	
	66	58	Not on Path	
	74	67	Not on Path	
	5	5		
	50	50	RTC	

Cell: E2

Comment: You can change this value to test other significance thresholds.

Cell: A4

Comment: Press the gray down arrow in this cell to select PWSs in an EPA Region.

Cell: B4

Comment: Press the gray down arrow in this cell to select PWSs in a single state.

Cell: C4

Comment: Press the gray down arrow in this cell to select PWSs by ID.

Cell: D4

Comment: Press the gray down arrow in this cell to select a single PWS.

Orange highlighting indicates system was previously >=11.

Cell: E4

Comment: ETT Score based on the formula: $Sum(S1 + S2 + S3 + ...) + n$

for violations that have not been addressed nor RTC'd

S (for each unaddressed violation) + n (applied at the water system level).

Cell: F4

Comment: 'Yes' indicates the PWS has one or more Acute (PN Tier 1) violations. You can use this as a filter to identify all PWSs having an acute violation.

Cell: I4

Comment: Date the system first became a priority (scored 11 or more).
Red Highlighting indicates that system is not fully addressed and was first >= 11 more than 6 months ago. 6 months is amount of time allowed for action in the ERP.

Cell: J4

Comment: Sum of S   for every violation (including addressed, not addressed, and RTCd viols)

Use this to find systems with most violations such as chronic repeat violators.
Note that this PWS list only includes systems with a current ETT score of 1 or greater.

Cell: K4

Comment: Sum of S

        for all violations Returned to Compliance

        Cell: L4

Comment: For Systems previously at 11 or higher,   are all violations:

        - returned to compliance (RTC)? or on the path to compliance via a formal action (On Path)? OR

        - are any violations not RTCd nor on the path (Not on Path) ?

Cell: G1

Comment: Press the gray down arrow in this cell to select PWSs by ID.

Cell: H1

Comment: Press the gray down arrow in this cell to select a single PWS.

Orange highlighting indicates system was previously >=11.

Cell: I1

Comment: ETT Score based on the formula: Sum(S1 + S2 + S3 +. . . .) + n

for violations that have not been addressed nor RTC'd

S (for each unaddressed violation) + n (applied at the water system level).

Cell: J1

Comment: 'Yes' indicates the PWS has one or more Acute (PN Tier 1) violations. You can use this as a filter to identify all PWSs having an acute violation.

Cell: M1

Comment: Date the system first became a priority (scored 11 or more).
Red Highlighting indicates that system is not fully addressed and was first >= 11 more than 6 months ago. 6 months is amount of time allowed for action in the ERP.

Cell: N1

Comment: Sum of S   for every violation (including addressed, not addressed, and RTCd viols)

Use this to find systems with most violations such as chronic repeat violators.
Note that this PWS list only includes systems with a current ETT score of 1 or greater.

Cell: O1

Comment: Sum of S

for all violations Returned to Compliance

Cell: P1

Comment: For Systems previously at 11 or higher,   are all violations:
- returned to compliance (RTC)? or on the path to compliance via a formal action (On Path)? OR
- are any violations not RTCd nor on the path (Not on Path) ?